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## PHOTOGRAPHIC INTERPRETATION REPORT

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

## KHABAROVSK RADIO COMMUNICATIONS RECEIVER AND TRANSMITTER STATIONS NEKRASOVKA, USSR

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JULY 1972 COPY NO. 121

6 PAGES PIR-033/72



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Table 1. Antennas at Khabarovsk Radio Communications Receiver Station Nekrasovka (Keyed to Figure 1)

Item	Antenna Type	Soviet Designator	Estimated Frequency Range (MHz)	Azimuth (degrees)	Item	Antenna Type	Soviet	Estimated Frequency Range (MHz)		muth (rees)
1	Fishbone	BS-2			2 4	Quadrant	$UGD_{\frac{32}{24.5}}d$	3.51 - 5.97	Omnidi	rectional
2	Fishbone	BS					12			
3	Fishbone	BS			2 5	Quadrant	$UGD\frac{12}{12}d$	9.35 - 15.90	Omnidi	rectional
4	Fishbone	BS					32			
5	Fishbone	BS - 2			26	Quadrant	UGD $\frac{32}{24.5}$ d	3.51 - 5.97	Omnidi	rectional
6	Fishbone	BS - 2					· UGD 12d	0.05 15.00	0111	
7	Fishbone	BS - 2		040	2 7	Quadrant	· UGD 12d	9.35 - 15.90	Omnidi	rectional
8	Fishbone	BS		065			$UGD_{\frac{32}{24.5}}d$	0.51.5.07	0 1.11	1
		30		0.45	28	Quadrant	UGD 24.5d	3.51 - 5.97	Omnidi	rectional
9	Horizontal	VGD 30 d	2.50 - 6.25	065			$UGD_{\frac{32}{24}} = d$	3.51 - 5.97	0111	rectional
10	dipole Horizontal dipole	$VGD\frac{30}{24}d$	2.50 - 6.25	105	29	Quadrant	UGD 24.5d	3.51 - 5.9/	Omnidi	rectional
11	Horizontal	VCD 30 24d	2.50 - 6.25	105						
11	dipole		2.30 - 0.23	103						
12	Horizontal	VGD 15	5.00 - 12.50	105						
12	dinole		9.00 12.90		Table	2 Ruildinge	at Khaharovek	Radio Communicatio	ons Recei	ver
13	Horizontal dipole	$VGD\frac{15}{12.5}d$	5.00 - 12.50	205	Table			(Keyed to Figure		
14	Horizontal	$VGD\frac{30}{24}d$	2.50 - 6.25	205						
14	dipole		2.0-		Item	Building	,			Stories
1.5	Horizontal	VGD 30 d	2.50 - 6.25	205	10011		2			
13	dipole		2.5-		A	Control				2
16	Horizontal	VGD 30 d	2.50 - 6.25	293	B	Probable bas	rracks			1
10	dipole				Č	Probable bar				1
17	Ouadrant	$UGD\frac{12}{12}d$	9.35 - 15.90	Omnidirectional	D	Steamplant				1 1
1,	quarter				E	Probable hou	ising			1
18	Ouadrant	$UGD_{\frac{32}{4.5}}^{\frac{32}{4.5}}d$	3.51 - 5.97	Omnidirectional	F	Probable hou				1
19	Quadrant	UGD 12d	9.35 - 15.90	Omnidirectional	G H*	Probable hou Support				1 1
20	Quadrant	$UGD\frac{12}{12}d$	9.35 - 15.90	Omnidirectional						
21	Quadrant	$UGD\frac{32}{24.5}d$	3.51 - 5.97	Omnidirectional						
22	Quadrant	$UGD\frac{32}{24.5}d$	3.51 - 5.97	Omnidirectional						
2 3	Quadrant	$UGD\frac{12}{12}d$	9.35 - 15.90	Omnidirectional						



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Table 3. Antennas at Khabarovsk Radio Communications Transmitter

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Station Nekrasovka (Keyed to Figure 2) Estimated Estimated Soviet Azimuth Azimuth Soviet Antenna Frequency Frequency Antenna Туре Designator Range (MHz) Туре Designator Range (MHz) (degrees) Item 2BS-2 2BS-2  $SGD_{\frac{B}{2}}RA$ 9.19 - 18.00 3.75 - 9.38 Fishbone Fishbone 18 Phased dipole 105/285 pair --Fishbone 2BS-2 2BS-2 3.75 - 9.38 9.19 - 18.00  $S \, G \, D \frac{B}{2} \, \, R \, A$ Fishbone 19 Phased dipole 135/315 Fishbone Fishbone 2BS-2 2BS-2 pair  $\text{SGD}_{\overline{2}}^{\underline{B}} \; \text{RA}$ 9.19 - 18.00 3.75 - 9.38 Fishbone Fishbone 2BS-2 --20 Phased dipole 165/345 2BS-2 pair 065 Fishbone BS - 2  $SGD_{\frac{B}{2}}^{B}RA$ 3.75 - 9.38 9.19 - 18.00 Phased dipole 015/195 3.75 - 9.38 9.19 - 18.00 Phased dipole pair  $SGD\frac{B}{2}RA$ 10 015/195 pair 11 Phased dipole  $SGD\frac{B}{2}RA$ 9.19 - 18.00 3.75 - 9.38 165/345 pair 9.19 - 18.00 3.75 - 9.38 Phased dipole pair  $SGD\frac{B}{2}RA$ 12 045/225 Table 4. Buildings at Khabarovsk Radio Communications Transmitter Station Nekrasovka (Keyed to Figure 2) 3.75 - 9.38 9.19 - 18.00 13  $SGD\frac{B}{2}RA$ 135/315 Phased dipole pair 9.19 - 18.00 3.75 - 9.38  $SGD\frac{B}{2}RA$ 14 Phased dipole 105/285 Item Building Stories A B C Control 15 Phased dipole  $SGD_{\overline{2}}^{B}RA$ 3.75 - 9.38 9.19 - 18.00 075/255 Probable administration pair Probable barracks Steamplant  $SGD\frac{B}{2}\,RA$ 9.19 - 18.00 3.75 - 9.38 Phased dipole 16 045/225 Support pair Support Support 3.75 - 9.38 9.19 - 18.00  $S G D_{\frac{B}{2}} R A$ 17 Phased dipole 075/255 pair

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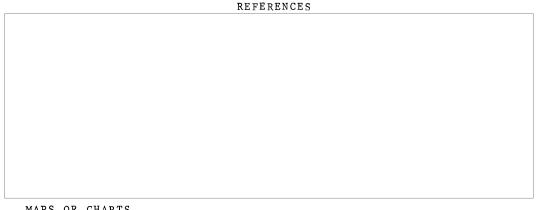
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The 24 phased dipole arrays are also paired. They have the following

Arrays	Azimuths (degrees)
10 and 21	15/195
11 and 20	165/345
12 and 16	45/225
13 and 19	135/315
14 and 18	105/285
15 and 17	75/255

- 8. The support area lies on the east edge of the antenna  $% \left( 1\right) =\left\{ 1\right\}$ field. It consists of a single-story control building, a probable administration building, a two-story probable barracks, a steamplant, three small support buildings, and approximately 12 smaller structures (Table 4). A mast-mounted probable R400 antenna (azimuth undetermined) is next to the control building. The entire antenna field and the support area are secured by a single fence. The service road to Khabarovsk and the village of Garovka enters from the north.
- 9. Although this facility is designated as a transmitting station, the presence of fishbone antennas indicates that its primary function is receiving.



MAPS OR CHARTS

ACIC Chart, Series 200, Sheet 0204-22, Scale 1:200,000

## DOCUMENTS

- USSR. Committee of Standards, Measurements, and Instruments, The USSR Council of Ministers, GOST 8025-67, Transmitting Shortwave Wideband Balanced Antennas (Counterfeed), Moscow, 1967 (UNCLASSIFIED)
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- US Department of Commerce. JPRS: 33,926, 27 Jan 66, translation from Russian of Antennas and Masts, F. A. Savitskiy, Ministry of Communications USSR, Moscow, 1962 (UNCLASSIFIED)
- RCA Service Company. Contract F 33657-69-C-0010, Soviet Antennas, A Contribution to the DIA Communications 25X1 Equipment Handbook, 31 Dec 68, (SECRET/ 25X1 REQUIREMENT 25X1

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